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David Bengtson

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26794

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TYCO TECHNOLOGY RESOURCES

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EXAMINER

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Response to Rule 312 Communication	Application No.	Applicant(s)	
	10/730,725	BENGTON ET AL.	
	Examiner	Art Unit	
	Nguyen Vo	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

1. ☒ The amendment filed on 31 December 2007 under 37 CFR 1.312 has been considered, and has been:

a) ☐ entered.

b) ☒ entered as directed to matters of form not affecting the scope of the invention.

c) ☐ disapproved because the amendment was filed after the payment of the issue fee.

Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.

d) ☐ disapproved. See explanation below.

e) ☐ entered in part. See explanation below.

Nguyen Vo
1-24-2008

Nguyen Vo
Primary Examiner
Art Unit: 2618

FIG. 4A is a block diagram of a PLL system. The system is divided into two main sections: a phase-locked loop (PLL) section (306) and a feedback control section (308).

PLL Section (306):

- PHASE INFO (401):** Provides input to the **SDM (402)**.
- SDM (402):** Summing junction that receives input from PHASE INFO (401) and the output of the **SUM (410)**.
- CHANNEL SELECTION (405):** Receives input from the **SUM (410)** and provides output to the **PDF (412)**.
- PDF (412):** Proportional Derivative controller that receives input from the **CHANNEL SELECTION (405)** and provides output to the **LOOP FILTER (414)**.
- LOOP FILTER (414):** Receives input from the **PDF (412)** and provides output to the **SUM (408)**.
- SUM (408):** Summing junction that receives input from the **LOOP FILTER (414)** and the output of the **VCO (410)**.
- VCO (410):** Voltage-Controlled Oscillator that receives input from the **SUM (408)** and provides output to the **SDM (402)** and the **DIVIDER (406)**.
- DIVIDER (406):** Receives input from the **VCO (410)** and provides output to the **PDF (412)**.

Feedback Control Section (308):

- AMPLITUDE INFO (416):** Receives input from the **COMBINING (420)** block and provides output to the **SDM (402)**.
- COMBINING (420):** Receives input from the **TO LOAD** and the output of the **PHASE SHIFTER (426)**.
- PHASE SHIFTER (426):** Receives input from the **TO LOAD** and the output of the **VARIABLE RESISTOR (428)**.
- VARIABLE RESISTOR (428):** Receives input from the **TO LOAD** and the output of the **PHASE SHIFTER (426)**.
- TO LOAD:** Receives input from the **COMBINING (420)** block and provides output to the **PHASE SHIFTER (426)** and the **VARIABLE RESISTOR (428)**.
- PHASE SHIFTER (426):** Receives input from the **TO LOAD** and the output of the **VARIABLE RESISTOR (428)**.
- VARIABLE RESISTOR (428):** Receives input from the **TO LOAD** and the output of the **PHASE SHIFTER (426)**.
- PHASE SHIFTER (426):** Receives input from the **TO LOAD** and the output of the **VARIABLE RESISTOR (428)**.
- VARIABLE RESISTOR (428):** Receives input from the **TO LOAD** and the output of the **PHASE SHIFTER (426)**.

FIG. 4A